

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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First Named Inventor	:	Robert O'Dell
Patent No.	:	6,956,968
Date Issued	:	October 18, 2005
Serial No.	:	10/053,876
Filed	:	January 18, 2002
Confirmation Number	:	7252
Examiner	:	Amir Alavi
Title	:	DATABASE ENGINES FOR PROCESSING IDEOGRAPHIC CHARACTERS AND METHODS THEREFOR
Attorney Docket No.	:	ZICO0041

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February 12, 2010

**Mail Stop: Certificate of Correction Branch**

Commissioner for Patents  
Office of Patent Publication  
P.O. Box 1450  
Alexandria VA 22313-1450

**Request for Certificate of Correction Under 37 CFR 1.322 pursuant to 35 USC 254**

Dear Sir:

Applicants, by their attorney, request a Certificate of Correction for the above-referenced patent. The correction requested involves a mistake made by the Patent Office. No new matter is provided with this Certificate of Correction. Attached is Form PTO/SB/44 (1 page) indicating the requested correction on the Letters Patent.

Please see copies of the Bibliographic Data Sheet (initialed by the Examiner, posted to PAIR on 5/9/2005), page 2 of the Executed Declaration, and page 1 of the Request for Corrected Filing Receipt, all showing the correct spelling of the second inventor, **Xiao Jun Wang**.

Attached is a copy of page 1 of the Patent, showing the requested correction.

Applicants do not believe any fees are due with this submission. However, if fees are deemed necessary, authorization is given to the Commissioner to charge any fees and credit any overpayments to Deposit Account No. 07-1445 (Order No. ZICO0041).

Respectfully submitted,



Michael A. Glenn  
Reg. No. 30,176

Customer No. 22862

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**Page 1 of 1

PATENT NO. : 6,956,968  
APPLICATION NO.: 10/053,876  
ISSUE DATE : October 18, 2005  
INVENTOR(S) : Robert O'Dell, Xiao Jun Wang, Changshi Xu

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On page 1 of the patent, under the list of Inventors, Inventor Xiao Jun "Wan" should be replaced with Xiao Jun --Wang--. The list of Inventors should appear as follows:

(75) Inventors: Robert O'Dell, Oakland, CA (US);  
Xiao Jun Wang, Beijing (CN);  
Changshi Xu, Calgary (CA)

**MAILING ADDRESS OF SENDER (Please do not use customer number below):**

Glenn Patent Group  
3475 Edison Way, Ste. L  
Menlo Park, CA 94025

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

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Page 1 of 1



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Bib Data Sheet

CONFIRMATION NO. 7252

SERIAL NUMBER 10/053,876	FILING OR 371(c) DATE 01/18/2002 RULE	CLASS 382	GROUP ART UNIT 2621	ATTORNEY DOCKET NO. ZICOP004
<b>APPLICANTS</b> Robert O'Dell, Oakland, CA; Xiao Jun Wang, Beijing, CHINA; Changshi Xu, Calgary, CANADA; <i>A.A.</i> <i>o.k.</i>				
<b>** CONTINUING DATA *****</b> This application is a CIP of 09/857,363 06/04/2001 PAT 6,801,659 which is a CON of PCT/US00/00135 01/04/2000 which claims benefit of 60/114,628 01/04/1999				
<b>** FOREIGN APPLICATIONS *****</b> <i>A.A.</i> <i>None</i>				
<b>IF REQUIRED, FOREIGN FILING LICENSE GRANTED</b> <b>** 02/11/2002</b>				
Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no 35 USC 119 (a-d) conditions <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after met <i>Allowance</i> Verified and <i>A.A.</i> <i>A.A.</i> <i>A.A.</i> Acknowledged Examiner's Signature Initials		STATE OR COUNTRY CA	SHEETS DRAWING 13	TOTAL CLAIMS 33  INDEPENDENT CLAIMS 3
<b>ADDRESS</b> 32986				
<b>TITLE</b> DATABASE ENGINES FOR PROCESSING IDEOGRAPHIC CHARACTERS AND METHODS THEREFOR				
<b>FILING FEE RECEIVED 1104</b>	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees ( Filing ) <input type="checkbox"/> 1.17 Fees ( Processing Ext. of time ) <input type="checkbox"/> 1.18 Fees ( Issue ) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit	

**COPY**



**DECLARATION AND POWER OF ATTORNEY  
FOR ORIGINAL U.S. PATENT APPLICATION**

Attorney's Docket No. ZICOP004

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:  
**DATABASE ENGINES FOR PROCESSING IDEOGRAPHIC CHARACTERS AND METHODS**  
**THEREFOR**, the specification of which,

(check one)

1. ☐ is attached hereto.
2. ☒ was filed on January 18, 2002 as  
U.S. Application No. 10/053,876  
and was amended on N/A
3. ☐ was filed on \_\_\_\_\_ as  
International PCT Application No. \_\_\_\_\_  
and was amended on \_\_\_\_\_

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, CFR § 1.56.

**Prior Foreign Application(s)**

I hereby claim foreign priority benefits under Title 35, United States code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed:

			Priority Benefits Claimed?
			Yes ___ No ___
_____ (Application No.)	_____ (Country)	_____ (Filing Date)	
_____ (Application No.)	_____ (Country)	_____ (Filing Date)	Yes ___ No ___

**Provisional Application(s)**

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

<u>60/114,628</u> (Application No.)	<u>01/04/1999</u> (Filing Date)
_____ (Application No.)	_____ (Filing Date)

10053876-061002

**Prior U.S. Application(s)**

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

<u>09/857,363</u>	<u>06/04/2001</u>	<u>Pending</u>
(Application No.)	(Filing Date)	(Status - patented, pending, abandoned)
<u> </u>	<u> </u>	<u> </u>
(Application No.)	(Filing Date)	(Status - patented, pending, abandoned)

## Power of Attorney

And I hereby appoint Joseph A. Nguyen, Esq. (Reg. No. 37,899) as my principal attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

**Direct Correspondence To:**

**Joseph A. Nguyen, Esq.**  
**3410 Antonacci Ct.**  
**San Jose, CA 95148**

**Direct Telephone Calls To:**

**Joseph Nguyen at 408-274-5004**

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Typewritten Full Name of  
Sole or First Inventor: Robert O'DELL Citizenship: US

Inventor's signature: Robert O'Dell Date of Signature: May 7, 2002

Residence: (City) Oakland (State/Country) CA/USA

Post Office Address: 602 Calmar Avenue, Oakland, California 94610

Second Inventor: WANG  
Xiao Jun WANG Citizenship: Canada

Inventor's signature: WANG Date of Signature: Apr 14, 2002

Residence: (City) Beijing (State/Country) PRC

Post Office Address: Beijing Sunflower Tower, Suite 900, 37 Maizidian Street, Chaoyang District, Beijing, PRC 100026

**COPY**

Third Inventor: Changshi XU

Citizenship: Canada

Inventor's signature: *[Signature]*

Date of Signature: April 2, 2002

Residence: (City) Calgary

(State/Country) Alberta/CANADA

Post Office Address: 31 Citadel Peak Circle NW, Calgary, Alberta, CANADA T3G 4E8

10053876-061002



IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

# 12/05 Receipt  
2 Feb  
#6

In re the application of:	)	Atty. Dkt. No. ZICO P004/ZI-0112
O'Dell, Wang, and Xu	)	Examiner: Unassigned
Application No. 10/053,876	)	Group No. 2623
Filed: 01/18/2002	)	
Title: DATABASE ENGINES FOR	)	
PROCESSING IDEOGRAPHIC	)	
CHARACTERS AND METHODS	)	
THEREFOR	)	

COPY

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail to: Commissioner for Patents, Washington, DC 20231 on November 21, 2002.

Signed:   
Marcia M. Holstrom

REQUEST FOR CORRECTED FILING RECEIPT

Commissioner for Patents  
Office of Initial Patent Examination  
Customer Service Center  
Washington, DC 20231

Sir:

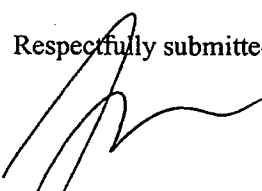
Enclosed is a copy of the Filing Receipt for the above-identified patent application. Please reprint the Filing Receipt as follows and mail the corrected copy to the undersigned.

Change the Last Name of the Second Inventor from "Wan" to "Wang"



If any fees are due for this action, the Commissioner is authorized to charge those fees to Deposit Account 50-2284 (Order No. ZICO P004/ZI-0112).

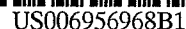
Respectfully submitted,



Joseph A. Nguyen  
Registration No. 37,899

P. O. Box 61147  
Sunnyvale, CA 94088





(12) **United States Patent**  
**O'Dell et al.**

(10) **Patent No.:** US 6,956,968 B1  
(45) **Date of Patent:** Oct. 18, 2005

- (54) DATABASE ENGINES FOR PROCESSING  
IDEOGRAPHIC CHARACTERS AND  
METHODS THEREFOR

- (75) Inventors: Robert O'Dell, Oakland, CA (US);  
Xiao Jun Wan, Beijing (CN);  
Changshi Xu, Calgary (CA)

(73) Assignee: **Zi Technology Corporation, Ltd.,**  
Hamilton (BM)

- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 570 days.

- (21) Appl. No.: **10/053,876**  
(22) Filed: **Jan. 18, 2002**

- |           |    |   |         |                      |         |
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## FOREIGN PATENT DOCUMENTS

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## OTHER PUBLICATIONS

- Leon, N.H., *Character Indexes of Modern Chinese*, Institute of Asian Studies Monograph Series, No. 42, Curzon Press. (Physical copy of document furnished on Nov. 24, 2004).

### Related U.S. Application Data

(Continued)

- (63) Continuation-in-part of application No. 09/857,363, filed on Jun. 4, 2001, now Pat. No. 6,801,659, which is a continuation of application No. PCT/US00/00135, filed on Jan. 4, 2000.
- (60) Provisional application No. 60/114,628, filed on Jan. 4, 1999.
- (51) **Int. Cl.**<sup>7</sup> ..... **G06K 9/18**
- (52) **U.S. Cl.** ..... **382/182; 382/185**
- (58) **Field of Search** ..... **382/177, 181, 382/182, 185, 218, 219, 224, 229; 715/535; 341/28; 345/467**

- Primary Examiner*—Bhavesh M. Mehta  
*Assistant Examiner*—Amir Alavi  
*(74) Attorney, Agent, or Firm*—IP Strategy Group, PC

- (57) **ABSTRACT**

- (56)
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## U.S. PATENT DOCUMENTS

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A computer-implemented method for encoding a handwritten stroke set, each of the handwritten stroke set being representative of a constituent stroke of an ideographic character, to obtain an encoded input sequence. The method includes ascertaining a shape of a first stroke of the handwritten stroke set and ascertaining one of a location information and a size information pertaining to the first stroke. The method further includes assigning a first code to the encoded input sequence responsive to a determination of the shape of the first stroke and a determination of the one of the location information and the size information of the first stroke. The first code is predefined to represent the shape of the first stroke and the one of the location information and the size information of the first stroke. The first code is sufficiently unique to distinguish the first code from other codes representing other permutations of shape and the one of the location information and the size information of the first stroke.

**33 Claims, 13 Drawing Sheets**

